



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

December 1, 2011

Mr. Joseph Pacher, Vice President
R.E. Ginna Nuclear Power Plant, LLC
Constellation Energy Nuclear Group, LLC
1503 Lake Road
Ontario, New York 14519

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT – NRC EVALUATION OF CHANGES,
TESTS, OR EXPERIMENTS AND PERMANENT PLANT MODIFICATIONS
TEAM INSPECTION REPORT 05000244/2011007

Dear Mr. Pacher:

On October 20, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the R.E. Ginna Nuclear Power Plant. The enclosed inspection report documents the inspection results, which were discussed on October 20, 2011, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. In conducting the inspection, the team reviewed selected procedures, calculations and records, observed activities, and interviewed station personnel.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system, Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in black ink, reading "Lawrence T. Doerflein". The signature is fluid and cursive, with the first name "Lawrence" and last name "Doerflein" clearly legible.

Lawrence T. Doerflein, Chief
Engineering Branch 2
Division of Reactor Safety

Docket No. 50-244
License No. DPR-18

Enclosure:
Inspection Report 05000244/2011007
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

December 1, 2011

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Sincerely,

/RA/

Lawrence T. Doerflein, Chief
Engineering Branch 2
Division of Reactor Safety

Docket No. 50-244
License No. DPR-18

SUNSI Review Complete: SMP (Reviewer's Initials)

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DATE	11/28/11	11/29/11	12/01/11				

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2011007

Licensee: Constellation Energy Nuclear Group, LLC

Facility: R.E. Ginna Nuclear Power Plant, LLC

Location: Ontario, New York

Inspection Period: October 3 through October 20, 2011

Inspectors: S. Pindale, Senior Reactor Inspector, Division of Reactor Safety (DRS),
Team Leader
E. Burket, Reactor Inspector, DRS
R. Fuhrmeister, Senior Reactor Inspector, DRS

Approved By: Lawrence T. Doerflein, Chief
Engineering Branch 2
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000244/2011007; 10/03/2011-10/20/2011; R.E. Ginna Nuclear Power Plant (Ginna);
Engineering Specialist Plant Modifications Inspection.

This report covers a two week on-site inspection period of the evaluations of changes, tests, or experiments and permanent plant modifications. The inspection was conducted by three region based engineering inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

No findings were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R17 Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications (IP 71111.17)

.1 Evaluations of Changes, Tests, or Experiments (28 samples)

a. Inspection Scope

The team reviewed five safety evaluations to determine whether the changes to the facility or procedures, as described in the Updated Final Safety Analysis Report (UFSAR), had been reviewed and documented in accordance with 10 CFR 50.59 requirements. In addition, the team evaluated whether Constellation had been required to obtain NRC approval prior to implementing the changes. The team interviewed plant staff and reviewed supporting information including calculations, analyses, design change documentation, procedures, the UFSAR, the Technical Specifications (TS), and plant drawings to assess the adequacy of the safety evaluations. The team compared the safety evaluations and supporting documents to the guidance and methods provided in Nuclear Energy Institute (NEI) 96-07, "Guidelines for 10 CFR 50.59 Evaluations," as endorsed by NRC Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," to determine the adequacy of the safety evaluations.

The team also reviewed a sample of twenty-three 10 CFR 50.59 screenings for which Constellation had concluded that no safety evaluation was required. These reviews were performed to assess whether Constellation's threshold for performing safety evaluations was consistent with 10 CFR 50.59. The sample included design changes, calculations, and procedure changes.

The team reviewed the safety evaluations that Constellation had performed and approved during the time period covered by this inspection (i.e., since the last modifications inspection) not previously reviewed by NRC inspectors. The screenings and 10 CFR 50.59 applicability determinations were selected based on the safety significance, risk significance, and complexity of the change to the facility.

In addition, the team compared Constellation's administrative procedures used to control the screening, preparation, review, and approval of safety evaluations to the guidance in NEI 96-07 to determine whether those procedures adequately implemented the requirements of 10 CFR 50.59. The safety evaluations and screenings reviewed by the team are listed in the Attachment.

b. Findings

No findings were identified.

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.2 Permanent Plant Modifications (11 samples)

.2.1 Containment Spray and Safety Injection Full Flow Recirculation Line Installation

a. Inspection Scope

The team reviewed a modification, engineering change package (ECP) 2009-0275, that installed larger recirculation lines in the discharge piping of the containment spray and safety injection systems, which discharge to the refueling water storage tank. The modification also replaced and relocated the containment spray pump discharge check valves (two valves; one per pump) and added four high point vents in the containment spray and safety injection system discharge piping. Constellation installed the containment spray and safety injection larger recirculation lines (six-inch and three-inch, respectively) to accommodate revised full flow pump testing requirements, as per the 2004 Edition of the ASME Operation and Maintenance Code. The check valves were replaced to address operational and testing challenges with the existing check valves; and the high point vents were added to address various issues associated with gas accumulation concerns in the containment spray and safety injection systems.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the containment spray and safety injection systems had not been degraded by the modification. The team interviewed engineering staff and reviewed technical evaluations associated with the modification to confirm the system would function and in accordance with the design assumptions. The team reviewed drawings and procedures to ensure that they were properly updated. The associated post-modification test (PMT) results were reviewed to ensure appropriate acceptance criteria had been met. The team also reviewed condition reports to determine if there were reliability or performance issues that may have resulted from the modification. In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.2 Change Action Time for Appendix R - Pull Stopping Turbine-Driven Auxiliary Feedwater Pump from 1 Minute to 4 Minutes

a. Inspection Scope

The team reviewed a modification, procedure change request (PCR) 10-00549, which changed (increased) the action time for pull stopping the turbine-driven auxiliary feedwater (TDAFW) pump from one minute to four minutes (during postulated control room fire scenarios). Although the action to perform this activity could reasonably be achieved within one minute, the associated technical evaluation determined that the action could be completed within four minutes without adverse consequences. The

Enclosure

need to pull stop the TDAFW pump is related to preventing TDAFW pump damage in the event that certain control room fires cause the condensate storage tank to drain as a result of postulated component failures.

The team reviewed the modification to verify that the design and licensing bases for postulated 10 CFR Part 50, Appendix R events had not been degraded by the modification. The team interviewed engineering staff and reviewed evaluations to confirm the details and assumptions in the modification. The team walked down the accessible portions of the TDAFW pump to assess the material condition of the system. Although the team identified that the associated screening determination was not performed for this modification, the team reviewed the associated condition report that Constellation initiated (for not performing the screening determination) and the controlling process (Appendix R evaluation) that acceptably evaluated the change. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.3 Installation of Orifice within the Turbine-Driven Auxiliary Feedwater Pump Lube Oil Regulating Valve Sensing Line

a. Inspection Scope

The team reviewed a modification (ECP-2009-0146) associated with an equivalency change for an orifice in the TDAFW pump lube oil regulating valve sensing line. Constellation had identified the orifice missing when a walkdown of the lube oil system was conducted during troubleshooting of the TDAFW pump (orifice was likely removed during prior maintenance but not re-installed). The purpose of the orifice is to prevent the TDAFW pump lube oil regulating valve from hunting by dampening the oil surges caused by the positive displacement lube oil pumps. After performing an equivalent change technical evaluation, Constellation manufactured and installed the orifice.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the TDAFW pump lube oil system had not been degraded by the modification. Specifically, the team verified that design specifications and material properties were equivalent or improved. The team interviewed design engineers and reviewed evaluations, post-modification test results, and associated maintenance work orders to verify that the orifice installation was appropriately implemented. The 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. Finally, the team walked down the TDAFW pump lube oil system with the system engineer to verify the maintenance activities were properly completed. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

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.2.4 Change Control Room Emergency Air Treatment System Fans Restart Acceptance Band

a. Inspection Scope

The team reviewed a procedure modification (PCR-11-03976) associated with the control room emergency air treatment system (CREATS) fan 'A' and fan 'B' timers, 2/SI-CRAX and 2/SI-CRBX, respectively. The CREATS provides a protected environment from which operators can control the plant following an uncontrolled release of radioactivity. The modification changed the reset acceptance band of the CREATS fan timers in procedure STP-O-R-2.2, "Diesel Generator Load and Safeguard Sequence Test." During performance of the test, the CREATS fans stop upon initiation of a safety injection signal and are restarted in a nominal 50 seconds following their safeguards bus re-energization as part of the bus load shedding and emergency diesel generator (EDG) load sequencing. The acceptance band was changed from 42.75 - 67.25 seconds to 46.0 - 54.0 seconds, and the monitored initiation point for the timers was changed from the safety injection signal to the re-energization of the associated safeguards bus. The eight-second band around the nominal 50 seconds allows for normal drift of the Agastat time delay relays. Constellation implemented this procedure change to ensure the CREATS fans restarted within the times calculated in the UFSAR Chapter 15 transient analysis and that the monitored initiation point was set appropriately for those accidents where a loss-of-offsite power is assumed.

The team reviewed the procedure change to verify that the design bases, licensing bases and performance capability of CREATS had not been degraded by the change. The team reviewed the calculation and associated analysis to verify the assumptions used in the procedure change were valid. The team interviewed engineering staff to verify the intent and adequacy of the modification. In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.5 Emergency Diesel Generator Cooling System Modification

a. Inspection Scope

The team reviewed a modification (ECP-2008-0040) that installed two air operated valves (AOV) in each emergency diesel generator (EDG) service water supply line to isolate the flow to the lube oil coolers and jacket water heat exchangers when the EDGs are not operating. The AOVs (4598G, 4598H, 4599G, and 4599H) open upon an EDG start signal to allow service water to enter the associated coolers and heat exchangers. Constellation implemented this modification to address fouling issues in the coolers and heat exchangers associated with the constant supply of service water.

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The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the EDG cooling water system had not been degraded by modification. The team interviewed design engineers, and reviewed evaluations, surveillance and post-modification test results, and associated maintenance work orders to verify that the AOV installation was appropriately implemented and would function in accordance with design assumptions. The team verified the appropriate changes were made to alarm response procedures, system drawings, and the UFSAR. The 10 CFR 50.59 safety evaluation associated with this modification was reviewed as described in section 1R17.1 of this report. Finally, the team walked down the accessible portions of the modification to ensure the system configuration was in accordance with design instructions. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.6 Replacement of the Turbine-Driven Auxiliary Feedwater Steam Admission Valves

a. Inspection Scope

The team reviewed a modification (ECP-10-000072) that replaced the TDAFW pump steam admission valves 3504A and 3505A. The modification included replacing the Limatorque SB-0-25 actuators with SMB-0-25 actuators, and replacing the flex wedge gate valves with parallel slide gate valves. Constellation implemented this modification to address leakage issues that were attributing to accelerated corrosion of the TDAFW pump governor control valve stem.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the TDAFW steam admission valves had not been degraded by the modification. The team verified that the design specifications of the new valves and actuators were equivalent or improved. The team interviewed design engineers and reviewed calculations, evaluations, purchase specifications, vendor verification and validation reports, and post-modification testing results to verify that the valve replacement modification was appropriately implemented. In addition, the team reviewed corrective action documents to determine if there were reliability or performance issues that may have resulted from the modification. The 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. Finally, the team walked down the TDAFW pump steam admission valves to assess the material condition and standby configuration. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

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.2.7 Potential Fire Effects on Condenser Makeup and Reject Valves

a. Inspection Scope

The team reviewed a modification (ECP-2008-0018) to the controls for the condenser makeup and reject valves. This modification was related to implementation of the performance-based fire protection program under National Fire Protection Association Standard 805 (NFPA 805). Adverse impacts of fire induced damage on input circuits to the hotwell level controller could cause loss of inventory in the condensate storage tank (CST). The purpose of the modification was to ensure adequate CST inventory would be available to conduct safe shutdown activities in the post-fire operating environment.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the post-fire safe shutdown systems had not been degraded by the modification. The team reviewed technical evaluations associated with the modification to determine what malfunctions fire induced damage to the hotwell level controller inputs would cause. The team verified that the circuit analyses had been performed in accordance with NEI 00-01, "Guidance for Post-Fire Safe Shutdown Analysis." In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.8 Sump 'B' Strainer Foreign Material Exclusion Covers

a. Inspection Scope

The team reviewed a modification (ECP-2008-0097) that installed covers to protect the containment sump 'B' perforated strainer surface area from mechanical damage and foreign material intrusion during outage work activities. When the strainers are required to be functional, the covers are secured to the top of the corresponding strainer modules. During an outage, the strainer covers are repositioned to the face side of the strainer modules to protect the strainer surface. Existing procedures were revised to ensure the covers are removed when the sump is required to be operable.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the containment sump had not been degraded by the installation of the protective covers. The team reviewed calculations and technical evaluations to verify that the covers would not impact the strainers, and that the strainer would function in accordance with design assumptions. The team reviewed the PMT results, which included a visual inspection of the covers and fasteners, to ensure that appropriate criteria had been specified and met. In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

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b. Findings

No findings were identified.

2.9 Installation of New Digital Safety Injection Accumulator Pressure Indicators and Accumulator Low Pressure Setpoint Change

a. Inspection Scope

The team reviewed a modification (ECP-2009-0030) that installed digital indicators for the safety injection accumulator pressure channels in the main control room panels. The digital indication has improved accuracy over the previous analog indicators, reducing the instrument uncertainty and allowing a wider operating band for accumulator pressure. The modification also changed the low pressure alarm setpoint to provide an alarm function prior to exceeding the operability limits, which was a challenge with the existing configuration due to the narrow operating band and relatively large uncertainty of the installed indicators.

The team reviewed the modification to verify that the design bases, licensing bases, and performance capability of the safety injection accumulator pressure instrumentation had not been degraded by the modification. The team reviewed technical evaluations, instrument uncertainty calculations, and manufacturer data sheets for the new indicators to verify that operating characteristics were properly incorporated into the design of the modification. The team reviewed post-modification test criteria and results to ensure that appropriate criteria had been specified and met. In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

2.10 MOV-856 Evaluation to Determine Acceptable Spring Pack Displacement

a. Inspection Scope

The team reviewed a modification (ECP-2009-0122) that changed the testing method for the refueling water storage tank suction motor-operated valve (MOV), MOV-856, for the residual heat removal pumps. The modification changed test parameters to use torque switch spring pack deflection rather than stem thrust for setting the torque switch trip points during the 2009 refueling outage. The torque switch low trip setting ensures that the valve will close against the expected differential pressure, and the high torque switch trip setting ensures that the motor stall torque and the valve weak link strength will not be exceeded. The valve is required to close during the switchover to the recirculation phase of accident mitigation.

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The team reviewed the modification to verify that the design bases, licensing bases and performance capabilities of the emergency core cooling systems were not adversely affected by the modification. The team reviewed calculations and technical evaluations to verify that the revised test method would ensure the safety function of the valve was not degraded. In addition, the 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2.11 Protect Charging Pumps on Loss of Component Cooling Water

a. Inspection Scope

The team reviewed a modification (ECP-2009-0232) that would automatically protect the charging pumps on a loss of component cooling water (CCW). The CCW system cools the non-regenerative heat exchanger in the letdown line from the reactor coolant system. A loss of CCW would result in high temperatures in the letdown flow, which could cause damage to the charging pumps and result in additional operational challenges. Prior to the modification, procedures were in place to instruct operators to manually respond to this postulated transient. The modification used existing temperature sensors downstream of the non-regenerative heat exchanger and the volume control tank (VCT) to generate a control signal to isolate the VCT and switch charging pump suction to the refueling water storage tank in the event of high temperatures at both locations.

The team reviewed the modification to verify that the design bases, licensing bases and performance capability of the chemical and volume control system would not be degraded by installation of the dual bistables, relays, additional wiring, and the new control function. The team reviewed calculations and technical evaluations to ensure that adequate net positive suction head would remain available to the charging pumps at all times. The team reviewed the associated post-modification test to verify that appropriate criteria were specified and met. The team also verified that associated surveillance tests, operating procedures, and combustible loading had been updated. The 10 CFR 50.59 screening determination associated with this modification was reviewed as described in section 1R17.1 of this report. The documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems (IP 71152)

a. Inspection Scope

The team reviewed a sample of condition reports associated with 10 CFR 50.59 and plant modification issues to determine whether Constellation was appropriately identifying, characterizing, and correcting problems associated with these areas, and whether the planned and/or completed corrective actions were appropriate. In addition, the team reviewed condition reports written on issues identified during the inspection to verify adequate problem identification and incorporation of the problem into the corrective action system. The condition reports reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4OA6 Meetings, including Exit

The team presented the inspection results to Mr. J. Pacher, Vice President - Ginna, and other members of Constellation's staff at an exit meeting on October 20, 2011. The team returned the proprietary information reviewed during the inspection and verified that this report does not contain proprietary information.

Enclosure

ATTACHMENT
SUPPLEMENTAL INFORMATION
KEY POINTS OF CONTACT

Constellation Personnel

E. Durkish, Design Engineer
J. Guider, Design Engineer
M. Harriman, Design Engineer
C. Holder, Design Engineer
J. Jackson, Senior Licensing Engineer
M. Zweigle, Design Engineer Manager

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

None.

LIST OF DOCUMENTS REVIEWED

10 CFR 50.59 Evaluations

EVAL-2008-0002, Installation of Two AOVs in EDG Service Water Lines, dated 12/10/08
EVAL-2009-0001, Program to Raise the Maximum RCS Lithium Concentration, dated 9/26/09
EVAL-2010-0001, Changes to Procedure RF-8.4, "Fuel and Core Component Movement in the Spent Fuel Pool" to Allow Fuel Assemblies to be Loaded into ISFSI DSCs, dated 6/21/10
EVAL-2010-0002, Disable Rod Control System Auto Rod Withdrawal Function, dated 7/12/10
EVAL-2010-0003, Change Request Package TRM/074 - Redefine Spent Fuel Pool Cooling Requirements in Technical Requirements Manual Sections 3.7.7 and 3.9.4, dated 10/8/10

10 CFR 50.59 Screened-out Evaluations

ECP-2008-0071, EDG Lube Oil and Jacket Water Cooler Tube Bundle Replacement, Rev. 0
ECP-2009-0009, Replacement of Containment Recirculation Fan Cooler Inlet Louvers, dated 2/3/08
ECP-2009-0080, Replace Tyco Potter Brumfeld Series KHAU Relays, Rev. 0
ECP-2009-0242, Minimum Wall Thickness Values for Steam Generator Primary Nozzles, Rev. 0
ECP-2009-0441, Replacement of Copper Piping with Stainless Steel for the Service Water Supply and Return to the RHR Pump Room Coolers, Rev. 000
ECP-2009-0481, EDG SW AOV Control Switches for 4598G, 4598H, 4599G, and 4599H, dated 12/16/09
ECP-10-000033, Sump Pool Level for Small Breaks >2" Where the RCS Refills, dated 2/10/10

Attachment

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ECP-10-000355, Calcium Silicate Insulation Jacket Banding in Containment, dated 10/7/10
ECP-10-000733, Replace 'A' SFP Pump Bearing Housing with an Equivalent Housing, dated 9/22/10
ECP-10-000935, Install Jumper in Cubicle Bus 16/17C, Rev. 0000
ECP-11-000236, Convert ECP-10-000557 from a Temporary Change to a Permanent Plant Modification, dated 5/5/11
PASPKG-2008-0674-013, Modify Procedures to Address Degrading Bus Voltage, dated 4/17/08
PASPKG-2009-0143-001, Incorporate New ACB 2008-0150 for MDAFW Lube Oil Discharge Pressure, dated 2/2/09
PCR-2008-0591, Revision to O-6.11, Control of Mini-Purge Exhaust Valves While Depressurizing Containment, dated 3/8/08
PCR-2009-0661, Revision to ES-1.1, SI Termination, dated 4/14/09
PCR-10-04095, Revision to STP-O-12.2, Emergency Diesel Generator 'B', Rev. 1
PCR-11-00165, Revision to STP-O-16QB, AFW Pump 'B' - Quarterly, dated 4/19/11
PCR-11-01435, Revision to E-1, Loss of Reactor or Secondary Coolant, dated 3/25/11
PCR-11-01957, Revision to DA-EE-97-069, Battery Load Profiles, Rev. 1
PCR-11-03668, Revision to STP-O-R-6.1, ILRT Penetration Valve Alignment, dated 5/18/11
PCR-11-04817, Revision to E-0, Reactor Trip or Safety Injection, dated 8/10/11
PCR-11-04818, Revision to ECA-0.0, Loss of all AC Power, dated 8/10/11
PCR-11-05534, Revision to ECA-0.0, Loss of all AC Power, dated 10/3/11

Modification Packages

ECP-2008-0018, Potential Fire Effects on Condenser Makeup and Reject Valves, Rev. 0
ECP-2008-0040, Installation of Two AOVs in Each EDG Service Water Line, Rev. 0
ECP-2008-0097, Sump 'B' Strainer Foreign Material Exclusion Covers, Rev. 0
ECP-2009-0030, Installation of New Digital Safety Injection Accumulator Pressure Indicators and Accumulator Low Pressure Setpoint Change, Rev. 0000.01
ECP-2009-0122, MOV-856 Evaluation to Determine Acceptable Spring Pack Displacement, Rev. 0
ECP-2009-0146, Installation of Orifice within the TDAFW Pump Lube Oil Regulating Valve Sensing Line, Rev. 0
ECP-2009-0232, Protect Charging Pumps on Loss of Component Cooling Water, Rev. 0000
ECP-2009-0275, Containment Spray and SI Full Flow Recirculation Line, Rev. 0000
ECP-10-000072, Replace TDAFW Steam Admission Valves 3504A and 3505A Including the Limitorque Actuators OP/3504A and OP/3505A, Rev. 0
PCR-10-00549, Change Action Time for Appendix R - Pull Stopping TDAFW Pump from 1 Minute to 4 Minutes, dated 2/15/10
PCR-11-03976, Change CREATS Fans 'A' and 'B' Restart Acceptance Band, dated 5/25/11

Calculations, Analysis, and Evaluations

10.26, UFSAR Chapter 15 Transient Analysis Calculation Sheet, Rev. 1
CALC-2010-0014, Pipe Stress and Pipe Support Analysis for Pipe Segment MS-120 Due to Replacement of Valves, 3505A, 3504A, 3505B, and 3504B, Rev. 000
DA-ME-98-038, MOV Thrust Limit Calculation for MOV 3504A, Rev. 4
DA-ME-98-039, MOV Thrust Limit Calculation for MOV 3505A, Rev. 4

Attachment

A-3

DA-ME-98-138, Emergency Diesel Generator Lube Oil and Jacket Water Heat Exchanger
Plugging Limits and Thermal Performance at Limiting Service Water Flows, Rev. 1
DA-ME-98-139, Emergency Diesel Generator Lube Oil and Jacket Water Heat Exchanger
Service Water Differential Pressure Limits, Rev. 002
DA-NS-08-050, Ginna Fuel Handling Accident Offsite and Control Room Doses, Rev. 0
PCR-2004-0070, Canister Sipping Accident, Rev. 000

Condition Reports

2008-003157	2011-001415	2011-005212	2011-007299*
2009-003680	2011-001419	2011-006287	2011-007335*
2009-007495	2011-002467	2011-006290	2011-007343*
2009-007785	2011-002650	2011-006854*	2011-007359*
2009-009310	2011-002943	2011-006953*	2011-007360*
2010-005086	2011-003552	2011-007065*	2011-007361*
2010-005722	2011-003917	2011-007287*	2011-007364*

(* denotes NRC identified during this inspection)

Drawings

33013-1231, Main Steam, Rev. 40
33013-1248, Auxiliary Cooling - Spent Fuel Pool Cooling, Rev. 38
33013-1250, Station Service Cooling Water Safety Related, Sh. 1, Rev. 56
33013-1261, Containment Spray, Rev. 42
33013-1262, Safety Injection and Accumulators, Sh. 1, Rev. 27
33013-1262, Safety Injection and Accumulators, Sh. 2, Rev. 7
33013-1896, Instrument Air Turbine Bldg. and Screenhouse, Rev. 17
33013-2285, Motor Driven and TDAFW Pumps Lube Oil Skid, Rev. 18
MD22614, Nozzle Check Valve 6" - 300, ERV-Z, Butt Weld Ends, Rev. B

Procedures

A-601.10, Time Critical Action Management Program, Rev. 00001
A-601.9, EOP/AOP Support Documentation Control, Rev. 00604
AP-Elec.2, Safeguards Busses Low Voltage or System Abnormal Frequency, Rev. 0306
AP-RCS.4, Shutdown LOCA. Rev. 02010
AR-J-24, Emergency Diesel Gen 1A Panel, Rev. 01600
AR-J-32, Emergency Diesel Gen 1B Panel, Rev. 14
CH-120, Primary System Analysis Schedule and Limits, Rev. 00500
CNG-CA-1.01-1000, Corrective Action Program, Rev. 00401
CNG-CM-1.01-1003, Design Engineering and Configuration Control, Rev. 00401
CNG-CM-1.01-2001, Preparation and Control of CNG Calculations, Rev. 0000
CNG-NL-1.01-1011, 10 CFR 50.59/10 CFR 72.48 Applicability Determinations, Screenings and
Evaluations, Rev. 00200
CNG-PR-1.01-1011, Station-Specific Procedure Process, Rev. 00500
E-0, Reactor Trip or Safety Injection, Rev. 04001

Attachment

A-4

E-1, Loss of Reactor or Secondary Coolant, Rev. 03600 and Rev. 04000
E-3, Steam Generator Tube Rupture, Rev. 41
ECA-0.0, Loss of All AC Power, Rev. 03700
ECA-1.1, Loss of Emergency Coolant Recirculation, Rev. 24
ECA-2.1, Uncontrolled Depressurization of Both Steam Generators, Rev. 30
ECA-3.1, SGTR with Loss of Reactor Coolant - Subcooled Recovery Desired, Rev. 20
ECA-3.2, SGTR with Loss of Reactor Coolant - Saturated Recovery Desired, Rev. 30
ECA-3.3, SGTR without Pressurizer Pressure Control, Rev. 29
ES-0.1, Reactor Trip Response, Rev. 24
ES-1.2, Post-LOCA Cooldown and Depressurization, Rev. 0360
ES-1.3, Transfer to Cold Leg Recirculation, Rev. 04200
RE-100, Preparation, Review, and Approval of Fuel Movement Sequence Sheets and Document Closeout, Rev. 01200
RF-8.4, Fuel and Core Component Movement in the Spent Fuel Pool, Rev. 06003
S-16.16C, Safety Injection Pump 'C' Isolation/Restoration, Rev. 01800
S-16A, Safety Injection System Alignment, Rev. 07400
S-9, SFP Cooling System Operation, Rev. 00401
S-9S, Standby SFP Cooling System Installation, Fill and Vent Including Fire Water to SFP Backup Cooling, Rev. 02602
STP-O-12.1, Emergency Diesel Generator 'A', Rev. 01002
STP-O-R-2.2, Diesel Generator Load and Safeguard Sequence Test, Rev. 00701
STP-O-R-6.1, Integrated Leakage Rate Test Penetration Valving Alignment, Rev. 00102

Work Orders

C20806759	C20807213	C90462753
C20806760	C20807214	C91344678

Miscellaneous

GNA-2008-656, Training for Normally Closed AOVs Added to the EDG SW Line to the Jacket Water and Lube Oil Coolers, dated 12/03/08
GNA-2009-334, Training for Installation of Orifice LLO15 Upstream of V-5490P and Downstream of V-5490Q, dated 5/28/09
NUREG/CR-6604, RADTRAD: A Simplified Model for Radionuclide Transport and Removal and Dose Estimates, April 1998
R.E.Ginna Nuclear Power Plant - Amendment RE: Containment Operability During Refueling Operations (TAC No. ME0203), dated 8/12/09
Regulatory Guide 1.183, Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors, July 2000
Rockbestos/Suprenant I46-3433 Firewall III Specification Sheet, 2003 Edition
Self-Assessment SA-2010-000168, Readiness for NRC Inspection - 71111.17, Evaluation of Changes, Tests, or Experiments and Permanent Modifications (Triennial), dated 9/7/11
STD-MCE-09-08, Evaluation of the Effects of Elevated pH and Lithium Chemistry on Stress Corrosion Cracking of Primary System Materials for Ginna, dated 9/9/09

Attachment

Technical Requirements Manual, Revs. 40 and 45
Technical Specifications
Update Final Safety Analysis Report, Rev. 22

Completed Surveillance and Modification Acceptance Tests

STP-O-3-COMP-A, Containment Spray Pump 'A' Comprehensive Test, performed 6/3/11
STP-O-3-COMP-B, Containment Spray Pump 'B' Comprehensive Test, performed 5/29/11
STP-O-23.18A, LLRT of Containment Spray Header 'A' Pen 105, performed 5/30/11 and 6/2/11
STP-O-23.18B, LLRT of Containment Spray Header 'B' Pen 109, performed 5/27/11
STP-O-3QA, Containment Spray Pump 'A' Quarterly Test, performed 9/13/11
STP-O-3QB, Containment Spray Pump 'A' Quarterly Test, performed 7/7/11
M-64.1.2, MOVATS Testing of Motor Operated Valves for 3504A and 3505A, performed 5/5/11
and 5/6/11
PT-16Q-T, Auxiliary Feedwater Turbine Pump - Quarterly, performed 5/28/09, 10/3/09 and
12/1/09
STP-O-16-COMP-TLU, AFW Turbine Pump - Comprehensive Test Limited Use, performed
6/9/11
STP-O-2.5.7, EDG AOVs - Quarterly, performed 5/3/11, 5/16/11, 6/1/11, 7/22/11, 7/26/11 and
8/29/11

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
ASME	American Society of Mechanical Engineers
AOV	Air Operated Valve
CCW	Component Cooling Water
CFR	Code of Federal Regulations
CREATS	Control Room Emergency Air Treatment System
CST	Condensate Storage Tank
DRS	Division of Reactor Safety
ECP	Engineering Change Package
EDG	Emergency Diesel Generator
IP	Inspection Procedure
MOV	Motor-Operated Valve
NEI	Nuclear Energy Institute
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PCR	Procedure Change Request
PMT	Post-Modification Test
TDAFW	Turbine-Driven Auxiliary Feedwater
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
VCT	Volume Control Tank